using recombinant DNA technology has provided a set of genetic tools by Behavioral and biochemical responses mediating ethanol's actions have treatments. These techniques are reviewed, and their potential applications polygenic nature. Recent progress in the creation of new animal models mutant mice, as well as manipulation of protein synthesis with antisense been difficult to study in humans and animals because of their complex examined. These techniques include the creation of transgenic and null which the role of specific candidate genes in ethanol's actions can be \$0.23 Estimated total session cost 0.062 DialUnits 10jul00 06:54:56 User208669 Session D1651.1 \$0.22 0.062 DialUnits File1 \$0.22 Estimated cost File1

DIALOG(R)File 155:MEDLINE(R)

to alcohol research are discussed. (79 Refs.)

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08183377 94269635

Forward and reverse genetic approaches to behavior in the mouse [see comments

Takahashi JS; Pinto LH; Vitaterna MH

Department of Neurobiology and Physiology, Northwestern University,

Evanston, IL 60208.

Science (UNITED STATES) Jun 17 1994, 264 (5166) p1724-33, ISSN 0036-8075 Journal Code: UJ7 Contract/Grant No.: EY08467, EY, NEI; MH39592, MH, NIMH; MH49241, MH,

Comment in Science 1995 Jan 6;267(5194):17

Languages: ENGLISH

Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL

with high-efficiency mutagenesis in the mouse can uncover unknown genes and Modern molecular genetic and genomic approaches are revolutionizing the study of behavior in the mouse. "Reverse genetics" (from gene to phenotype) the mouse. Together, these approaches perrait a molecular analysis of both the recent availability of high-density genetic maps and physical mapping has been used to isolate a behavioral mutant of the circadian system. With learning in mice. In addition, "forward genetics" (from phenotype to gene) with targeted gene transfer provides a powerful tool to dissect behavior resources, positional cloning of virtually any mutation is now feasible in genes implicated in the regulation of long-term potentiation and spatial and has been used successfully to study the effects of null mutations in known and previously unknown genes regulating behavior. (161 Refs.) ?ts10/7/7

10/7/7

DIALOG(R)File 155:MEDLINE(R)

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08993752 97276296

Human cytomegalovirus glycoproteins.

Britt WJ; Mach M

Department of Pediatrics, University of Alabama at Birmingham 35233, USA.

\$0.23 Estimated cost this search \$0.01 TYMNET

(c) format only 2000 Dialog Corporation File 155:MEDLINE(R) 1966-2000/Sep W1

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Items Description

742707 DT=REVIEW?

979865 GENETIC?

10977 NULL

295 S1 AND S2 AND S3

27950 CODON OR CODONS

4 S4 AND S5

1595094 TECHNIQUES OR METHODS

41 S4 AND S7

366838 VIRUS OR VIRAL

20 S1 AND S3 AND S9 657253 MOLECULAR S10

4892 SI AND S11 AND S9 S11 \$12

899 S7 AND S12 **S13**

3 S5 AND S13

229 S15 AND S13 S15 160155 S9/TI

7 t s8/7/28 29

DIALOG(R)File 155:MEDLINE(R)

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38445644 96026591

Use of transgenics, null mutants, and antisense approaches to study ethanol's actions.

Wehner JM; Bowers BJ

Alcoholism, clinical and experimental research (UNITED STATES) Aug 1995 School of Pharmacy, University of Colorado, Boulder 80309, USA.

Contract/Grant No.: AA-03527, AA, NIAAA; AA-00141, AA, NIAAA 19 (4) p811-20, ISSN 0145-6008 Journal Code: 35X

Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL

7 b 155

Intervirology (SWITZERLAND) 1996, 39 (5-6) p401-12, ISSN 0300-5526 ournal Code: GW7

Languages: ENGLISH

Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL

The complex biology of human cytomegalovirus (HCMV) necessarily begins with an initial interaction between the envelope of the infectious virion and the host cell. Understanding the initial events of infection will

envelope as well as their expression in the membranes of the infected cell. require a further analysis of the glycoprotein components of the virion

This experimental goal has been hindered by the large genome of HCMV, which may encode over 65 unique glycoproteins. Protein homologs of only 4 herpes simplex virus (HSV) glycoproteins, gB, gH, gL and gM, have been identified,

component of host immunity and represents a goal of vaccine development. glycoproteins may contribute to evasion of host cellular immune responses glycoproteins elicit strong host immune responses, including the production glycoprotein null mutants of HSV and other herpesviruses. Additional and potential functions have been postulated based on studies of specific Finally, recent findings have also provided evidence that HCMV replicative cycle of this virus is unknown. Several of the envelope glycoproteins have been analyzed but to date their function in the of virus-neutralizing antibodies. This response is felt to be a key

by limiting viral antigen presentation. (97 Refs.)

DIALOG(R)File 155:MEDLINE(R)

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08545193 95345936

Scale-up of recombinant virus and protein production in stirred-tank eactors.

Tom RL; Caron AW; Massie B; Kamen AA

Animal Cell Culture Group, Biotechnology Research Institute, Montreal,

Methods in molecular biology (UNITED STATES) 1995, 39 p203-24, ISSN Quebec, Canada.

064-3745 Journal Code: BU3

Languages: ENGLISH

Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL (26 Refs.)

10jul00 07:06:51 User208669 Session D1651.2 **\$8.52** 2.661 DialUnits File155

\$0.00 219 Type(s) in Format 6

\$0.80 4 Type(s) in Format 7

\$9.32 Estimated cost File155 \$0.80 223 Types

\$9.92 Estimated cost this search \$0.60 TYMNET

\$10.15 Estimated total session cost 2.724 DialUnits Logoff: level 00.06.30 D 07:06:51

10jul00 08:56:34 User208669 Session D1652.1

\$0.21 0.060 DialUnits File1

\$0.21 Estimated cost File1

\$0.21 Estimated cost this search

\$0.21 Estimated total session cost 0.060 DialUnits

File 155:MEDLINE(R) 1966-2000/Sep W1

(c) format only 2000 Dialog Corporation

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27663 TOBACCO

50 S1

10 TOBACCO AND S1

? t s2/7/8 10

DIALOG(R)File 155:MEDLINE(R)

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38003719 94376284

Structure-function relationship between tobacco mosaic virus coat protein and hypersensitivity in Nicotiana sylvestris.

Culver JN; Stubbs G; Dawson WO

Center for Agriculture Biotechnology, University of Maryland

Biotechnology Institute, College Park 20742.

Journal of molecular biology (ENGLAND) Sep 16 1994, 242 (2) p130-8, SSN 0022-2836 Journal Code: J6V

Languages: ENGLISH

Document type: JOURNAL ARTICLE

would predictably interfere with interface regions located between adjacent were created throughout the known structure of the TMV coat protein. aggregates demonstrated HR-eliciting coat proteins to have reduced protein affect the elicitation of the N' gene hypersensitive response (FIR) subunits in ordered aggregates of coat protein. Substitutions that did not Alterations in the structure of the tobacco mosaic virus (TMV) coat Substitutions that resulted in the elicitation of the HR resided within and relationship, amino acid substitutions with predicted structural effects result in the elicitation of the HR were either conservative or located outside these interface regions. In vitro analysis of coat protein in Nicotiana sylvestris. To investigate this structure-function

aggregate stability in comparison with non-HR-eliciting coat proteins and a proposed, in which disassembly of coat protein aggregates exposes a host inding corresponded with the predicted structural effects of HR-eliciting correlation existed between the strength of the elicited HR and the ability nost cell recognition and HR elicitation. A model for HR elicitation is of a substitution to interfere with ordered aggregate formation. This protein tertiary structure were found to prevent HR elicitation. These substitutions. Radical substitutions that predictably disrupted coat of coat protein quaternary structure but not tertiary structure lead to indings demonstrate that structural alterations that affect the stability receptor" binding site.

DIALOG(R)File 155:MEDLINE(R)

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)5624622 90085828

eaction but not required for the development of mosaic symptoms in Tobacco mosaic virus coat protein: an elicitor of the hypersensitive Nicotiana sylvestris.

Culver JN; Dawson WO

Department of Plant Pathology, University of California, Riverside 92521. Virology (UNITED STATES) Dec 1989, 173 (2) p755-8, ISSN 0042-6822

Iournal Code: XEA

Languages: ENGLISH

Document type: JOURNAL ARTICLE

removed from full-length cDNA clones of the HR-inducing mutant TMV 25 and These free-RNA mutants moved poorly out of inoculated leaves and produced a RNA, from both mutants, was recovered from inoculated and systemic mosaic revealed the presence of TMV-encoded 126-kDa protein and the absence of systemic mosaic symptom 9 to 12 weeks after inoculation. Infectious viral eaves. Western blot analysis of both inoculated and noninoculated leaves protein of TMV 25 is an elicitor molecule responsible for the induction of Specific nucleotide changes in the coat protein gene of tobacco mosaic virus (TMV) have been identified as responsible for the induction of the -IR in N. sylvestris and that the TMV coat protein is not required for the protein. To determine if the altered viral RNA or the altered protein acted he systemically infecting TMV U1 strain. Infectious transcripts of these altered genomes failed to induce HR in inoculated leaves of N. sylvestris. hypersensitive reaction (FIR) in Nicotiana sylvestris. Each of these coat protein for both mutants. This study demonstrates that the coat nucleotide changes resulted in amino acid substitutions in the coat directly to elicit the HR, the coat protein translational starts were development of systemic mosaic symptoms.

10jul00 08:58:23 User208669 Session D1652.2

\$1.05 0.328 DialUnits File 155 \$0.00 10 Type(s) in Format 6

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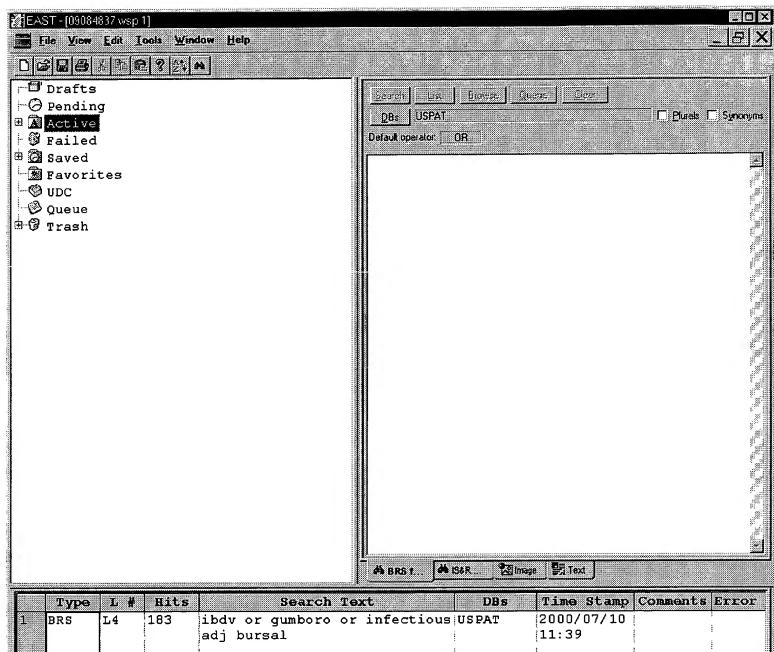
\$1.45 Estimated cost File155

\$0.10 TYMNET

\$1.55 Estimated cost this search

\$1.76 Estimated total session cost 0.388 DialUnits Logoff: level 00.06.30 D 08:58:23 5407 NESTED ? s nested(w)stop **S**2 7 b 357 \$0.22 Estimated total session cost 0.062 DialUnits \$0.25 Estimated total session cost 0.063 DialUnits \$3.38 Estimated total session cost 0.916 DialUnits 07jul00 12:16:27 User208669 Session D1649.1 07jul00 12:23:39 User208669 Session D1649.2 07jul00 13:57:14 User208669 Session D1650.1 (c) format only 2000 Dialog Corporation (c) format only 2000 Dialog Corporation File 155:MEDLINE(R) 1966-2000/Sep W1 File 155:MEDLINE(R) 1966-2000/Sep W1 \$0.00 34 Type(s) in Format 6 \$2.73 0.852 DialUnits File155 333 LEAKY AND MUTAT? \$0.22 0.062 DialUnits File1 \$0.22 0.063 DialUnits File1 \$3.13 Estimated cost this search \$0.22 Estimated cost this search \$0.25 Estimated cost this search 1295 FRAME AND STOP Logoff: level 00.06.30 D 12:23:39 \$2.73 Estimated cost File155 742707 DT=REVIEW? \$0.22 Estimated cost File1 \$0.22 Estimated cost File1 Set Items Description Set Items Description Items Description 0 S2 AND S3 5 S2 AND S1 2 SI AND S5 \$0.00 34 Types 27 S2 AND S5 \$0.40 TYMNET \$0.03 TYMNET ? s nested(w)stop 7 b 155

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File 357:Derwent Biotechnology Abs 1982-2000/Jul B2
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	Туре	L#	Hits	Search Text	DBs	Time Stamp	Comments	ETTOT
1	BRS	L4	183	ibdv or gumboro or infectious adj bursal	USPAT	2000/07/10 11:39		
2	BRS	L 5	45	birna\$	USPAT	2000/07/10 11:39		
3	BRS	L6	53	ipnv or pancreatic adj necrosis	USPAT	2000/07/10 11:40		
4	BRS	L7	62	vp5	USPAT	2000/07/10 11:40		
5	BRS	L8	7669	orf or open adj reading adj frame\$1	USPAT	2000/07/10 11:41		
6	BRS	ь 1	5	7 and (4 or 5 or 6)	USPAT	2000/07/10 11:41		
7	BRS	L10	84	8 and (4 or 5 or 6)	USPAT	2000/07/10 11:44		
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